

## SEQUENCE LISTING

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       O'DOWD, BRIAN F.
       GEORGE, SUSAN R.
<120> METHOD OF IDENTIFYING TRANSMEMBRANE PROTEIN-INTERACTING COMPOUNDS
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<140> US 10/509,787
<141> 2003-04-11
<150> PCT/CA03/00542
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<150> 60/371,704
<151> 2002-04-12
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<151> 2003-01-27
<150> 60/422,891
<151> 2002-11-01
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<151> 2002-06-12
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Glu Leu Leu
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<223> primer
<400> 105
taatacgact cactataggg
                                                                    20
<210> 106
<211> 44
<212> DNA
<213> Artificial Sequence
<220>
<223>
      primer
<400> 106
gactgcagcc tggtggtacc gcagagcaag ccacatagct gggg
                                                                    44
<210> 107
<211> 40
<212> DNA
<213> Artificial Sequence
<220>
<223> primer
<400> 107
gctgctctcc cacaaaaagt ttaagcggca gaagatctgg
                                                                    40
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<210> 108
<211> 40
<212> DNA
<213> Artificial Sequence
<220>
<223> primer
<400> 108
ccagatette tgccgettaa actttttgtg ggagageage
                                                                     40
<210> 109
<211> 21
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> Xaa equals Orn
<400> 109
Thr Val Leu Ala Leu Leu Ser His Arg Arg Ala Leu Lys Xaa Lys Ile
               5
Trp Pro Gly Ile Pro
<210> 110
<211> 21
<212> PRT
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<223> synthesized
<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> Xaa equals Orn
<400> 110
Thr Val Leu Ala Leu Leu Ser His Lys Lys Phe Lys Arg Xaa Lys Ile
                                   10
                                                       15
Trp Pro Gly Ile Pro
           20
<210> 111
<211> 40
```

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<212> DNA
<213> Artificial Sequence
<220>
<223> primer
<400> 111
gctcttcggg ctcgagcagc gatgcgaccc tccgggacgg
                                                                      40
<210> 112
<211> 39
<212> DNA
<213> Artificial Sequence
<220>
<223> primer
<400> 112
ctatcctccg tggtaccgct gctccaataa attcactgc
                                                                      39
<210> 113
<211> 37
<212> DNA
<213> Artificial Sequence
<220>
<223> primer
<400> 113
cacatcgttc ggaagaagtt taagcggagg ctgctgc
                                                                      37
<210> 114
<211> 40
<212> DNA
<213> Artificial Sequence
<220>
<223> primer
cctgcagcag cctccgctta aacttcttcc gaacgatgtg
                                                                      40
<210> 115
<211> 19
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 115
Arg Arg Arg His Ile Val Arg Lys Arg Thr Leu Arg Arg Leu Leu Gln
                5
                                    10
Glu Arg Glu
```

```
<210> 116
<211> 19
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 116
Arg Arg Arg His Ile Val Arg Lys Phe Lys Arg Arg Leu Leu Gln
               5
                                   10
Glu Arg Glu
<210> 117
<211> 49
<212> DNA
<213> Artificial Sequence
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<223> primer
<400> 117
gaggactctg aacaccgaat tcgccgccat ggacgggact gggctggtg
                                                                     49
<210> 118
<211> 45
<212> DNA
<213> Artificial Sequence
<220>
<223> primer
<400> 118
gtgtggcagg attcatctgg gtaccgcggt tgggtgctga ccgtt
                                                                     45
<210> 119
<211> 41
<212> DNA
<213> Artificial Sequence
<220>
<223> primer
<400> 119
cctctgagga cctgaaaaag aagagaaagg ctggcatcgc c
                                                                     41
<210> 120
<211> 41
<212> DNA
<213> Artificial Sequence
```

```
<220>
<223> primer
<400> 120
ggcgatgcca gcctttctct tctttttcag gtcctcagag g
                                                                       41
<210> 121
<211> 33
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 121
Asn Pro Ile Ile Tyr Ala Phe Asn Ala Asp Phe Arg Lys Ala Phe Ser
Thr Leu Leu Ser Ser Glu Asp Leu Lys Lys Glu Glu Ala Ala Gly Ile
                                25
Ala
<210> 122
<211> 33
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 122
Asn Pro Ile Ile Tyr Ala Phe Asn Ala Lys Lys Phe Lys Arg Phe Ser
Thr Leu Leu Ser Ser Glu Asp Leu Lys Lys Lys Arg Lys Ala Gly Ile
                                25
Ala
<210> 123
<211> 45
<212> DNA
<213> Artificial Sequence
<220>
<223> primer
<400> 123
```

45

cctagtccgc agcaggccga attcgccacc atggacagca gcacc

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<210> 124
<211> 44
<212> DNA
<213> Artificial Sequence
<220>
<223> primer
<400> 124
gatggtgta gaccggtacc gcgggcaatg gagcagtttc tgcc
                                                                     44
<210> 125
<211> 45
<212> DNA
<213> Artificial Séquence
<220>
<223>
      primer
<400> 125
cctagtccgc agcaggccga attcgccacc atggacagca gcacc
                                                                     45
<210> 126
<211> 45
<212> DNA
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<223> primer
<400> 126
ggatggtgtg agaccggtac cgcgggcaat ggagcagttt ctgcc
                                                                     45
<210> 127
<211> 30
<212> DNA
<213> Artificial Sequence
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<223>
      primer
<400> 127
gccttcctgg ataaaaaatt caagcgatgc
                                                                     30
<210> 128
<211> 31
<212> DNA
<213> Artificial Sequence
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<223> primer
<400> 128
gcatcgcttg aatttttat ccaggaaggc g
```

31

```
<210> 129
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 129
Pro Lys Lys Lys Arg Lys Val
               5
<210> 130
<211> 8
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<220>
<221> MISC_FEATURE
<222> (4)..(14)
<223> Xaa equals a sequence of any 11 amino acids
<400> 130
Arg Arg Arg Xaa Lys Arg Arg Lys
<210> 131
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<220>
<221> MISC_FEATURE
<222> (3)..(17)
<223> Xaa equals a sequence of any 15 amino acids
<400> 131
Lys Lys Xaa Lys Lys Arg Lys
               5
<210> 132
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
```

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<400> 132
Lys Arg Lys Arg Arg Pro
               5
<210> 133
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 133
Pro Lys Lys Asn Arg Leu Arg Arg Lys
<210> 134
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<220>
<221> MISC FEATURE
<222> (5)..(24)
<223> Xaa equals a sequence of any 20 amino acids
<400> 134
Lys Arg Gln Arg Xaa Lys Lys Ser Lys Lys
<210> 135
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 135
Pro Ala Ala Lys Arg Val Lys Leu Asp
       `5
<210> 136
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
```

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<400> 136
Gln Arg Lys Arg Gln Lys
<210> 137
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 137
His Arg Ile Glu Glu Lys Arg Lys Arg Thr Tyr Glu Thr Phe Lys Ser
Ile
<210> 138
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 138
Lys Lys Lys Tyr Lys Leu Lys
1 5
<210> 139
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 139
Lys Ser Lys Lys Lys Ala Gln
        5
<210> 140
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
```

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<400> 140

```
Lys Lys Lys Arg Lys Arg Glu Lys
<210> 141
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 141
Leu Lys Arg Pro Arg Ser Pro Ser Ser
<210> 142
<211> 13
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<220>
<221> MISC_FEATURE
<222> (4)...(25) <223> Xaa equals a sequence of any 22 amino acids
<400> 142
Lys Arg Lys Xaa Lys Glu Leu Gln Lys Gln Ile Thr Lys
<210> 143
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 143
Gly Lys Lys Tyr Lys Leu Lys His
                5
<210> 144
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 144
```

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```
Lys Lys Lys Tyr Lys Leu Lys
<210> 145
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 145
Lys Ser Lys Lys Lys Ala Gln
               5
<210> 146
<211> 12
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<220>
<221> MISC_FEATURE
<222> (4)..(353)
<223> Xaa equals a sequence of any 350 amino acids
<400> 146
Glu Glu Asp Xaa Lys Lys Lys Arg Glu Arg Leu Asp
<210> 147
<211> 25
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
Cys Tyr Phe Gln Lys Lys Ala Ala Asn Met Leu Gln Gln Ser Gly Ser
                5
Lys Asn Thr Gly Ala Lys Lys Arg Lys
<210> 148
<211> 12
<212> PRT
<213> Artificial Sequence
```

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<220>
<223> synthesized
<220>
<221> MISC_FEATURE
<222> (6)..(328)
<223> Xaa equals a sequence of any 323 amino acids
<400> 148
Asp Ile Leu Arg Arg Xaa Pro Lys Gln Lys Arg Lys
               5
<210> 149
<211> 22
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 149
Ser Ser Asp Asp Glu Ala Thr Ala Asp Ser Gln His Ser Thr Pro Pro
               5
                                    10
Lys Lys Lys Arg Lys Val
            20
<210> 150
<211> 12
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<220>
<221> MISC_FEATURE
      (6)..(14)
<223> Xaa equals a sequence of any 9 amino acids
<400> 150
Arg Lys Lys Arg Lys Xaa Lys Ala Lys Lys Ser Lys
               5
                                   10
<210> 151
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<220>
<221> MISC_FEATURE
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<222> (3)..(13)
<223> Xaa equals a sequence of any 11 amino acids
<400> 151
Lys Arg Xaa Lys Lys Leu Arg
                5
<210> 152
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<220>
<221> MISC_FEATURE
<222> (5)..(27)
<223> Xaa equals a sequence of any 22 amino acids
<220>
<221>
      MISC_FEATURE
<222>
      (5)..(26)
<223> Xaa equals any amino acid
<400> 152
Arg Arg Pro Ser Xaa Arg Arg Lys Arg Gln Lys
1
                5
<210> 153
<211> 8
<212> . PRT
<213> Artificial Sequence
<220>
<223> synthesized
<220>
<221> MISC_FEATURE
<222>
      (4)..(14)
      Xaa equals a sequence of any 11 amino acids
<400> 153
Arg Arg Arg Xaa Lys Arg Arg Lys
<210> 154
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<220>
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<221> MISC FEATURE
<222> (3)..(12)
<223> Xaa equals a sequence of any 10 amino acids
<400> 154
Lys Arg Xaa Lys Lys Leu
               5
<210> 155
<211> 12
<212> PRT
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<220>
<223> synthesized
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<221> MISC_FEATURE
<222> (5)..(11)
<223> Xaa equals a sequence of any 7 amino acids
<400> 155
Arg Lys Arg Lys Xaa Arg Arg Ser Arg Tyr Arg Lys
<210> 156
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 156
Met Ile Ser Glu Ala Leu Arg Lys Ala
<210> 157
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> synthesized
<400> 157
Lys Lys Phe Lys Arg
<210> 158
<211> 9
<212> PRT
<213> Artificial Sequence
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<220>

. . . .

<223> synthesized

<400> 158

Ala Phe Ser Ala Lys Lys Phe Lys Arg 1

<210> 159

<211> 446

<212> PRT

<213> Homo sapiens

<400> 159

Met Arg Thr Leu Asn Thr Ser Ala Met Asp Gly Thr Gly Leu Val Val 1 5 10 15

Glu Arg Asp Phe Ser Val Arg Ile Leu Thr Ala Cys Phe Leu Ser Leu 20 25 30

Leu Ile Leu Ser Thr Leu Leu Gly Asn Thr Leu Val Cys Ala Ala Val 35 40 45

Ile Arg Phe Arg His Leu Arg Ser Lys Val Thr Asn Phe Phe Val Ile 50 55 60

Ser Leu Ala Val Ser Asp Leu Leu Val Ala Val Leu Val Met Pro Trp 70 75 80

Lys Ala Val Ala Glu Ile Ala Gly Phe Trp Pro Phe Gly Ser Phe Cys 85 90 95

Asn Ile Trp Val Ala Phe Asp Ile Met Cys Ser Thr Ala Ser Ile Leu 100 105 110

Asn Leu Cys Val Ile Ser Val Asp Arg Tyr Trp Ala Ile Ser Ser Pro 115 120 125

Phe Arg Tyr Glu Arg Lys Met Thr Pro Lys Ala Ala Phe Ile Leu Ile 130 135 140

Ser Val Ala Trp Thr Leu Ser Val Leu Ile Ser Phe Ile Pro Val Gln 145 150 155 160

Leu Ser Trp His Lys Ala Lys Pro Thr Ser Pro Ser Asp Gly Asn Ala

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> Thr Ser Leu Ala Glu Thr Ile Asp Asn Cys Asp Ser Ser Leu Ser Arg

> Thr Tyr Ala Ile Ser Ser Ser Val Ile Ser Phe Tyr Ile Pro Val Ala

> Ile Met Ile Val Thr Tyr Thr Arg Ile Tyr Arg Ile Ala Gln Lys Gln

Ile Arg Arg Ile Ala Ala Leu Glu Arg Ala Ala Val His Ala Lys Asn

Cys Gln Thr Thr Gly Asn Gly Lys Pro Val Glu Cys Ser Gln Pro 

Glu Ser Ser Phe Lys Met Ser Phe Lys Arg Glu Thr Lys Val Leu Lys 

Thr Leu Ser Val Ile Met Gly Val Phe Val Cys Cys Trp Leu Pro Phe 

Phe Ile Leu Asn Cys Ile Leu Pro Phe Cys Gly Ser Gly Glu Thr Gln 

Pro Phe Cys Ile Asp Ser Asn Thr Phe Asp Val Phe Val Trp Phe Gly 

Trp Ala Asn Ser Ser Leu Asn Pro Ile Ile Tyr Ala Phe Asn Ala Lys 

Lys Phe Lys Arg Phe Ser Thr Leu Leu Gly Cys Tyr Arg Leu Cys Pro 

Ala Thr Asn Asn Ala Ile Glu Thr Val Ser Ile Asn Asn Asn Gly Ala 

Ala Met Phe Ser Ser His His Glu Pro Arg Gly Ser Ile Ser Lys Glu 

Cys Asn Leu Val Tyr Leu Ile Pro His Ala Val Gly Ser Ser Glu Asp 

Leu Lys Lys Glu Glu Ala Ala Gly Ile Ala Arg Pro Leu Glu Lys Leu 405 410 415

Ser Pro Ala Leu Ser Val Ile Leu Asp Tyr Asp Thr Asp Val Ser Leu 420 425 430

Glu Lys Ile Gln Pro Ile Thr Gln Asn Gly Gln His Pro Thr 435 440 445

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